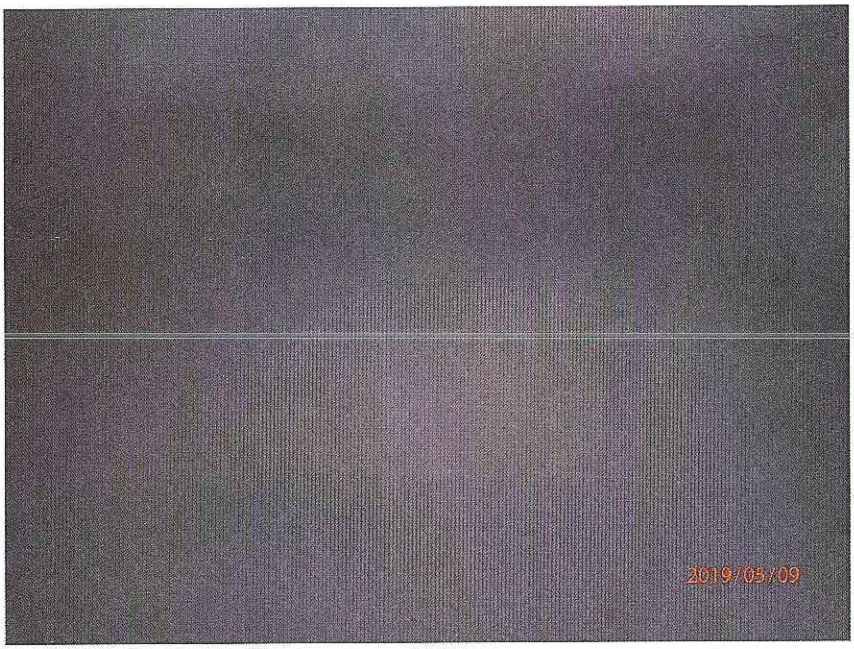
ATTACHMENT A
Photolog

Greenleaf Ledge Dairy, LLC
EPA Inspection May 9, 2019
All photos taken by Ben Atkinson, Agronomist, U.S. EPA
Camera: Ricoh WG-4 and Olympus

1: P5090001
Description: EPA observed feed and process wastewater flowing into the dredged ditch from the open feedlot attached to the Old Milking Cow Barn. EPA labeled the ditch and direction of flow from the Old Milking Cow Barn. Circled in the photo is a culvert outlet that drains flow from the south side of the barns and under the cow walkway.
Location: EPA is standing on the north side of the access road between the dredged ditch and the Old Milking Cow Barn.
Camera Direction: South
Date/Time: May 9, 2019/ 11:14 a.m.



2: P5090002
Description: Accidental Photo
Location:
Camera Direction:
Date/Time: May 9, 2019/ 11:15 a.m.

3: P5090003
Description: Close-up of process wastewater from the Old Milking Cow Barn and sediment from denuded areas around the dredged ditch discharging into the dredged ditch and flowing through the culvert inlet to the northeast under the access road.
Location: Northwest side of the dredged ditch.
Camera Direction: Northeast
Date/Time: May 9, 2019/ 11:17 a.m.

4: P5090004
Description: Clean sand stored outside of the Milking and Dry Cow Barn.
Location: Northwest corner of the Milking and Dry Cow Barn.
Camera Direction: Southeast
Date/Time: May 9, 2019/ 11:19 a.m.

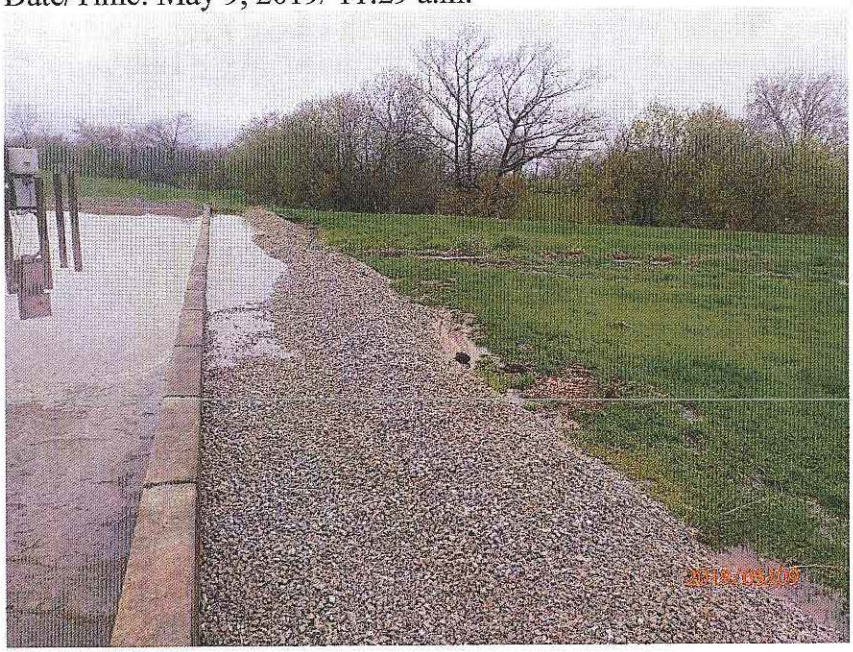
5: P5090005
Description: EPA observed the continuation of flow of the process wastewater within the dredged ditch from between the Old Milking Cow Barn and the Milking and Dry Cow Barn through a culvet under the access road to the northeast toward the roadside ditch. The red arrows show the direction of flow.
Location: North of the access road between the Old Milking Cow Barn and the Milking and Dry Cow Barn.
Camera Direction: Northeast
Date/Time: May 9, 2019/ 11:20 a.m.

6: P5090006
Description: Additional flow from the crop field to the south of the dredged ditch flows into the dredged ditch. The red arrow shows where EPA observed flow from the field to the south into the dredged ditch.
Location: Northeast of the Milking and Dry Cow Barn on the north side of the dredged ditch.
Camera Direction: South
Date/Time: May 9, 2019/ 11:21 a.m.

7: P5090007
Description: Runoff from the residence and crop field to the east merges with the flow from the process wastewater in the dredged ditch on Greenleaf's production area and was flowing north toward the roadside ditch.
Location: Northeast of the Milking and Dry Cow Barn on north side of the dredged ditch.
Camera Direction: East
Date/Time: May 9, 2019/ 11:21 a.m.

8: P5090008
Description: Runoff from the east was merging with the process wastewater flowing in the dredged ditch from between the Milking and Dry Cow Barn and the Old Milking Cow Barn in Greenleaf's production area flowing north toward the roadside ditch. It flowed through the culvert under Day Street to north side of Day Street and continues to flow through a grassed waterway into the East River.
Location: West side of the merged ditches (ditch from the east and the dredged ditch from Greenleaf).
Camera Direction: North
Date/Time: May 9, 2019/ 11:22 a.m.

9: P5090009
Description: Process wastewater on the silage feed pad flows to the northwest corner of the silage feed pad and is partially collected in a pit and pumped to the New Pit. The process wastewater not collected in the pit flows into the vegetated treatment area (VTA) to the north.
Location: North side of the silage feed pad.
Camera Direction: Northwest
Date/Time: May 9, 2019/ 11:29 a.m.

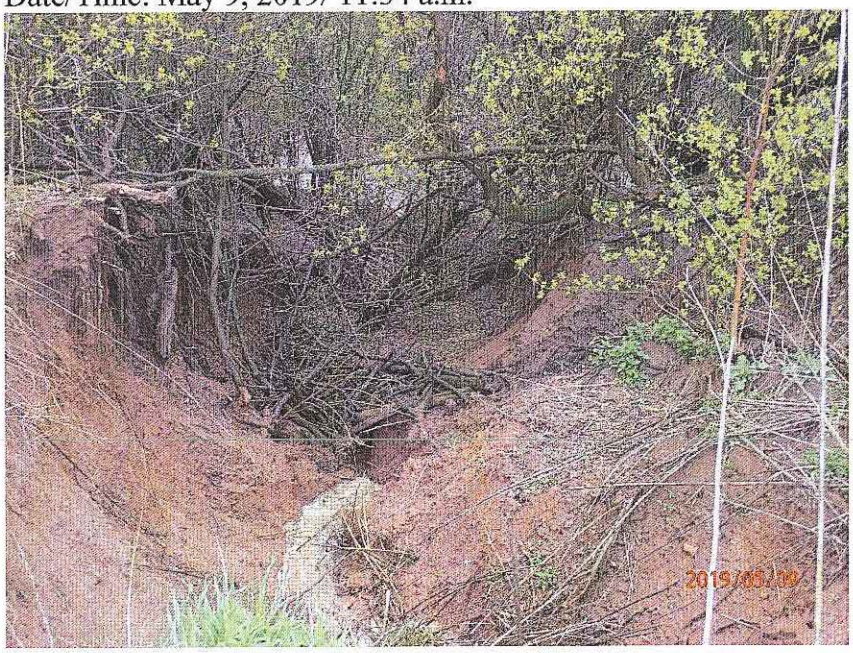


10: P5090010
Description: Spreader bar separating the silage feed pad and the vegetated treatment area.
Location: Northeast corner of the silage feed pad.
Camera Direction: West
Date/Time: May 9, 2019/ 11:31 a.m.

11: P5090011
Description: Spreader bar separating the silage feed pad with the vegetated treatment area
Location: Northeast corner of the silage feed pad.
Camera Direction: West
Date/Time: May 9, 2019/ 11:31 a.m.

12: P5090012
Description: Northwest corner of the VTA, EPA observed that the process wastewater entering the VTA from the silage feed pad had created a channel that conveyed process wastewater to the north on the west side of the VTA and then west down the embankment and into the unnamed tributary of the East River.
Location: Northwest corner of the VTA.
Camera Direction: South
Date/Time: May 9, 2019/ 11:33 a.m.

13: P5090013
Description: Eroded channel from the process wastewater that had flowed through the VTA and was discharging into the unnamed tributary of the East River.
Location: Northwest corner of the VTA.
Camera Direction: West
Date/Time: May 9, 2019/ 11:34 a.m.



14: P5090014
Description: Close-up of the eroded channel and the process wastewater that had flowed through the VTA and was discharging into the unnamed tributary of the East River.
Location: Northwest corner of the VTA.
Camera Direction: West
Date/Time: May 9, 2019/ 11:34 a.m.

15: P5090015
Description: Northwest side of the silage feed pad, EPA observed exposed feed mixing with stormwater.
Location: Northwest corner of the silage feed pad.
Camera Direction: South
Date/Time: May 9, 2019/ 11:39 a.m.

16: P5090016
Description: Feed mixed with stormwater on the silage feed pad.
Location: Center of the silage feed pad area.
Camera Direction: Northwest
Date/Time: May 9, 2019/ 11:41

17: P5090017
Description: Supposed to be a close-up of the stormwater mixed with feed on the silage feed pad.
Location: Center of silage feed pad.
Camera Direction: South.
Date/Time: May 9, 2019/ 11:42 a.m.

18: P5090018
Description: Open silage and stormwater mixed with feed on the silage feed pad.
Location: Center of silage feed pad.
Camera Direction: South
Date/Time: May 9, 2019/ 11:43 a.m.

19: P5090019
Description: Sample S01, named "VTA Runoff" was from the eroded channel from the process wastewater flowing through the VTA and discharging into the unnamed tributary of the East River.
Location: Northwest corner of the VTA.
Camera Direction: Down
Date/Time: May 9, 2019/ 11:58 a.m.

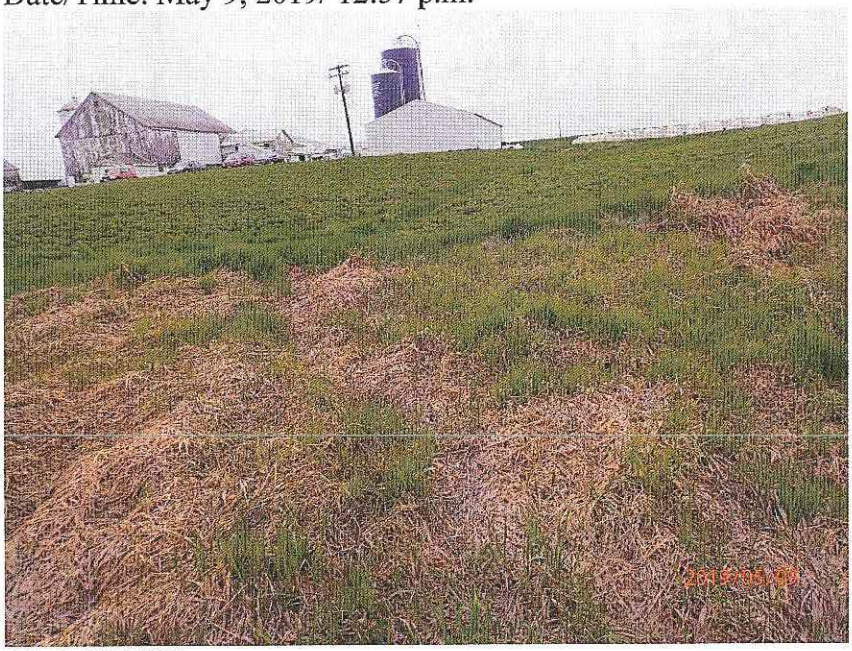
20: P5090020
Description: Northwest corner of the VTA, process wastewater bypassing the pit on the silage feed pad and was flowing through a channel in the VTA toward the embankment of the unnamed tributary of the East River. Blue dot represents approximately where EPA collected sample S01.
Location: Northwest corner of the VTA.
Camera Direction: South
Date/Time: May 9, 2019/ 11:58 a.m.

21: P5090021
Description: Sample S02 named "Culvert Outlet" was from the flow coming out of a culvert outlet that conveyed the flow from the dredged ditch between the Old Milking Cow Barn and the Milking and Dry Cown Barn.
Location: North of the access road between the Old Milking Cow Barn and the Milking and Dry Cow Barn.
Camera Direction: East
Date/Time: May 9, 2019/ 12:23 p.m.

22: P5090022
Description: Sample S02 named "Culvert Outlet" was from the flow coming out of a culvert outlet that conveyed the flow from the dredged ditch between the Old Milking Cow Barn and the Milking and Dry Cown Barn.
Location: North of the access road between the Old Milking Cow Barn and the Milking and Dry Cow Barn.
Camera Direction: Southwest
Date/Time: May 9, 2019/ 12:23 p.m.

23: P5090023
Description: Sample S02 named "Culvert Outlet" was from the flow coming out of a culvert outlet that conveyed the flow from the dredged ditch between the Old Milking Cow Barn and the Milking and Dry Cown Barn.
Location: North of the access road between the Old Milking Cow Barn and the Milking Cow and Dry Cow Barn.
Camera Direction: West
Date/Time: May 9, 2019/ 12:23 p.m.

24: P5090024
Description: On the south side of Day Street, viewing the grassed waterway between the alfalfa that conveys the flow from the calf hutch area.
Location: On the south side of Day Street, north of the calf hutch area.
Camera Direction: South
Date/Time: May 9, 2019/ 12:57 p.m.



25: P5090025
Description: On the south side of Day Street, showing the flow through the grassed waterway between the alfalfa from the calf hutch area.
Location: On the south side of Day Street, north of the calf hutch area.
Camera Direction: South
Date/Time: May 9, 2019/ 12:57 p.m.

26: P5090026
Description: Close-up of the water flowing in the grassed waterway between the alfalfa.
Location: Grassed waterway between Day Street and the calf hutch area.
Camera Direction: Down
Date/Time: May 9, 2019/ 12:58 p.m.

27: P5090027
Description: Roadside ditch on the south side of Day Street, the process wastewater from the calf hutch area flows north through the grassed waterway to the west in roadside ditch that discharges into the unnamed tributary of the East River.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 12:58 p.m.

28: P5090028
Description: The process wastewater from the calf hutch area was being conveyed through the grassed waterway into the roadside ditch on the south side of Day Street which was flowing into the East River. Red arrow is showing the direction of flow.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 12:58 p.m.

29: P5090029
Description: The process wastewater from the calf hutch area was being conveyed through the grassed waterway into the roadside ditch on the south side of Day Street which was flowing into the East River. Red arrow is showing the direction of flow.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 12:58 p.m.

30: P5090030
Description: The process wastewater from the calf hutch area was being conveyed through the grassed waterway into the roadside ditch on the south side of Day Street which was flowing into the East River. Red arrow is showing the direction of flow.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 12:58 p.m.

31: P5090031
Description: The process wastewater from the calf hutch area was being conveyed through the grassed waterway into the roadside ditch on the south side of Day Street which was flowing into the East River. Red arrow is showing the direction of flow red arrow shows the direction of flow in the roadside ditch. Red arrow is showing the direction of flow.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 12:58 p.m.

32: P5090032
Description: The process wastewater from the calf hutch area was being conveyed through the grassed waterway into the roadside ditch on the south side of Day Street which was flowing into the East River. Red arrow is showing the direction of flow red arrow shows the direction of flow in the roadside ditch. Red arrow is showing the direction of flow.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 12:59 p.m.

33: P5090033
Description: The process wastewater from the calf hutch area was being conveyed through the grassed waterway into the roadside ditch on the south side of Day Street which was flowing into the East River. Red arrow is showing the direction of flow red arrow shows the direction of flow in the roadside ditch. Red arrow is showing the direction of flow.The red arrow shows the direction of flow in the roadside ditch.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 12:59 p.m.

34: P5090034
Description: Flow from the roadside ditch south of Day Street channeled more deeply as it gets closer to the unnamed tributary of the East River.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 12:59 p.m.

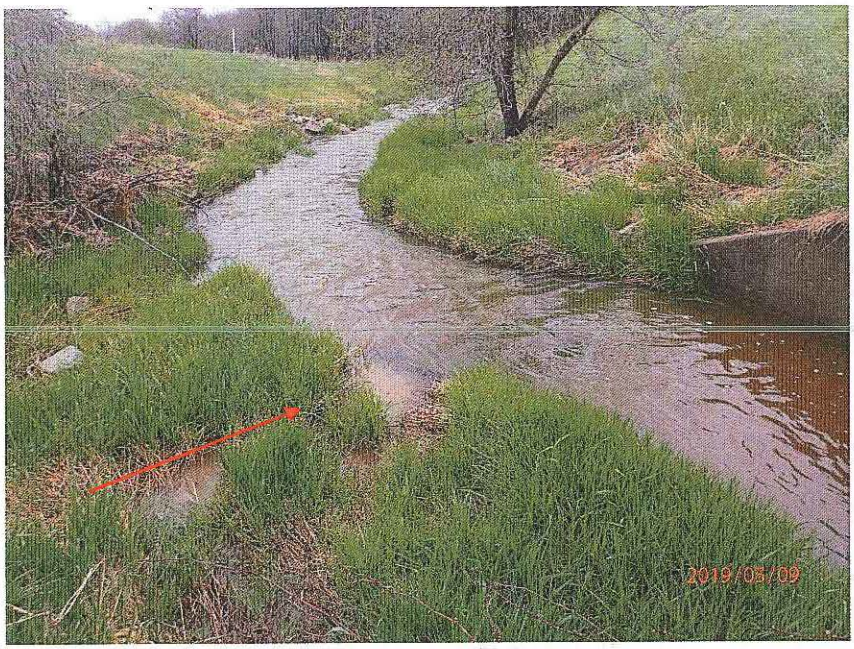
35: P5090035
Description: : Flow from the roadside ditch south of Day Street channeled more deeply as it gets closer to the unnamed tributary.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 12:59 p.m.

36: P5090036
Description: Flow from the roadside ditch south of Day Street channeled more deeply as it gets closer to the unnamed tributary.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: Down
Date/Time: May 9, 2019/ 12:59 p.m.

37: P5090037
Description: Flow from the roadside ditch south of Day Street channeled more deeply as it gets closer to the unnamed tributary.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 1:00 p.m.

38: P5090038
Description: Flow from the roadside ditch south of Day Street channeled more deeply as it gets closer to the unnamed tributary.
Location: In the roadside ditch on the south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 1:00 p.m.

39: P5090039
Description: Roadside ditch discharging into the unnamed tributary.
Location: At the confluence of the roadside ditch and the unnamed tributary.
Camera Direction: Southwest
Date/Time: May 9, 2019/ 1:00 p.m.



40: P5090040
Description: Roadside ditch discharging into the unnamed tributary.
Location: At the confluence of the roadside ditch and the unnamed tributary.
Camera Direction: Southwest
Date/Time: May 9, 2019/ 1:00 p.m.

41: P5090041
Description: Roadside ditch discharging into the unnamed tributary.
Location: At the confluence of the roadside ditch and the unnamed tributary.
Camera Direction: South
Date/Time: May 9, 2019/ 1:00 p.m.

42: RIMG0092
Description: Close-up of the water flowing within the grassed waterway.
Location: On the edge of the east side of the grassed waterway between the alfalfa and north of the calf hutch area and south of Day Street.
Camera Direction: Down
Date/Time: May 9, 2019/ 1:25 p.m.

43: RIMG0093
Description: Close-up of the water flowing in the grassed waterway.
Location: On the edge of the east side of the grassed waterway between the alfalfa north of the calf hutch area and south of Day Street.
Camera Direction: Down
Date/Time: May 9, 2019/ 1:25 p.m.

44: RIMG0094
Description: On the south side of Day Street, viewing the grassed waterway between the alfalfa.
Location: On the edge of the east side of the grassed waterway between the alfalfa north of the calf hutch area and south of Day Street.
Camera Direction: North
Date/Time: May 9, 2019/ 1:25 p.m.

45: RIMG0095
Description: On the south side of Day Street, viewing the grassed waterway between the alfalfa that conveys the flow from the calf hutch area.
Location: On the edge of the east side of the grassed waterway between the alfalfa north of the calf hutch area and south of Day Street.
Camera Direction: South
Date/Time: May 9, 2019/ 1:25 p.m.

46: RIMG0096
Description: Close-up of the water flowing in the grassed waterway that came through culvert outlet and from surface flow from the calf hutch area.
Location: On the edge of the east side of the grassed waterway between the alfalfa north of the calf hutch area and south of Day Street.
Camera Direction: Down
Date/Time: May 9, 2019/ 1:26 p.m.

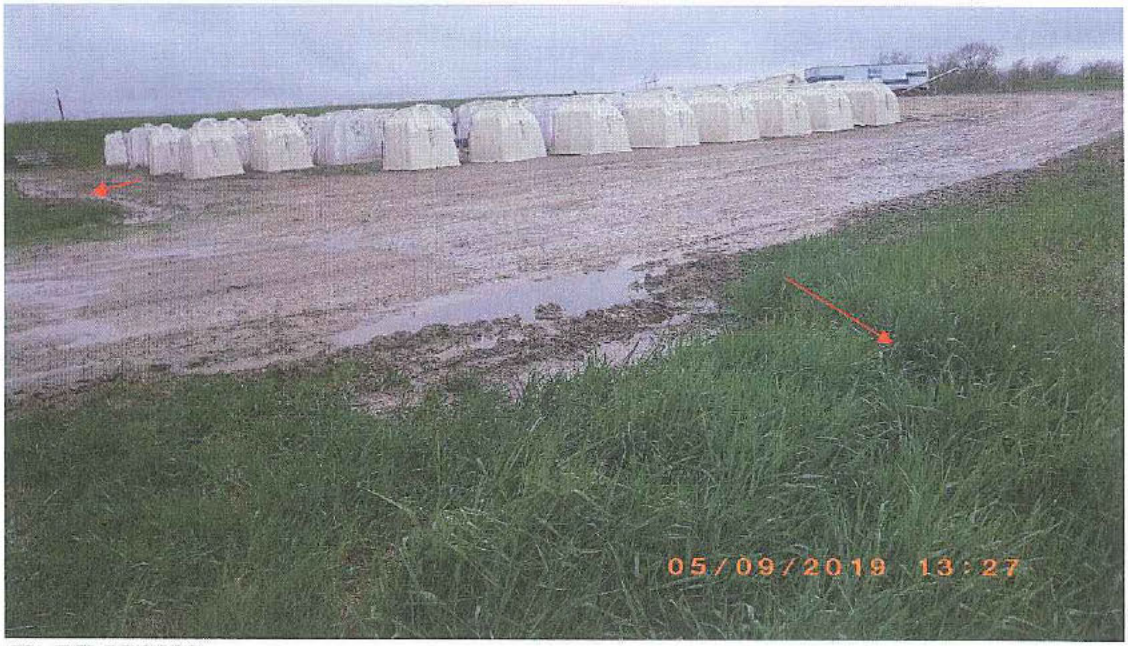
47: RIMG0097
Description: On the south side of Day Street, viewing the grassed waterway between the alfalfa that conveys the flow from the calf hutch area.
Location: On the edge of the east side of the grassed waterway between the alfalfa north of the calf hutch area and south of Day Street.
Camera Direction: North
Date/Time: May 9, 2019/ 1:26 p.m.

48: RIMG0098
Description: Culvert outlet and surface flow from the calf hutch area discharging into the grassed waterway that is between the alfalfa.
Location: Culvert outlet north of the calf hutch area
Camera Direction: South
Date/Time: May 9, 2019/ 1:26 p.m.

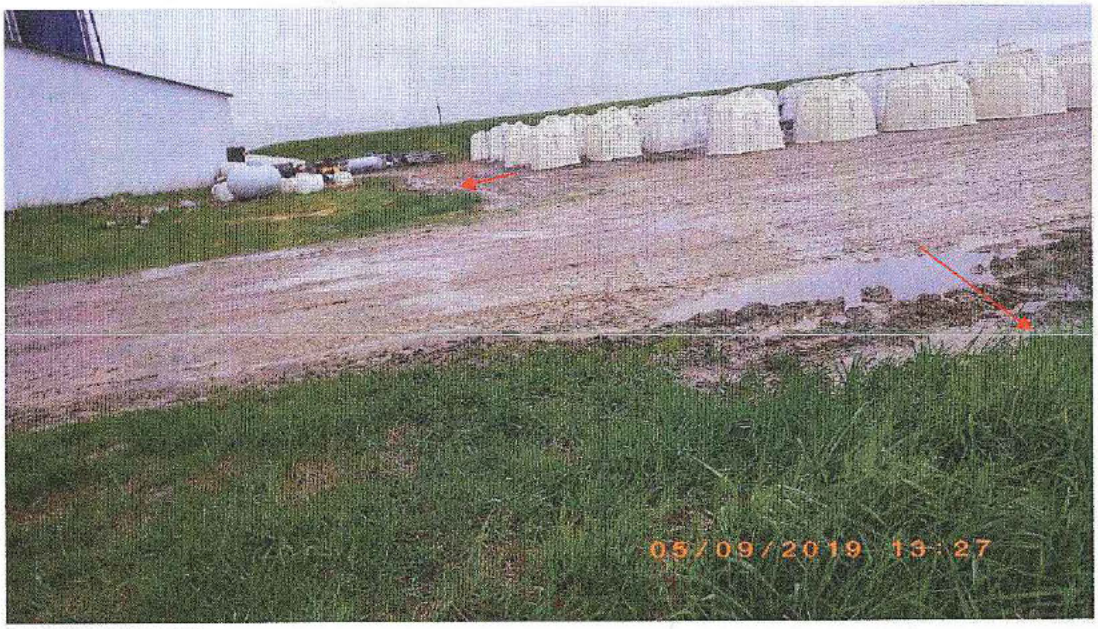
49: RIMG0099
Description: Rodent hole near the culvert outlet discharging into the grassed waterway from the calf hutch area.
Location: Culvert outlet north of the calf hutch area.
Camera Direction: Down
Date/Time: May 9, 2019/ 1:26 p.m.

50: RIMG0100
Description: Culvert outlet that conveys the flow from the calf hutch area to the grassed waterway between the alfalfa.
Location: Culvert outlet north of the calf hutch area.
Camera Direction: Down and west
Date/Time: May 9, 2019/ 1:27 p.m.

51: RIMG0101
Description: Flow from the culvert outlet and surface flow from the calf hutch area was flowing through the grassed waterway in the alfalfa field.
Location: Culvert outlet north of the calf hutch area.
Camera Direction: North
Date/Time: May 9, 2019/ 1:27 p.m.



52: RIMG0102
Description: Process wastewater from the calf hutch area surface flows to the north and flows to the east into a culvert inlet into the grassed waterway. Red arrows show the direction that the process wastewater from the calf hutch area flows to a tile inlet and overland flow into the grassed waterway.
Location: Culvert outlet north of the calf hutch area.
Camera Direction: Southwest
Date/Time: May 9, 2019/ 1:27 p.m.



53: RIMG0103
Description: Process wastewater from the calf hutch area surface flows to the north and flows to the east into a culvert inlet into the grassed waterway. Red arrows show the direction that the process wastewater from the calf hutch area flows to a tile inlet and overland flow into the grassed waterway.
Location: Culvert outlet north of the calf hutch area.
Camera Direction: Southwest
Date/Time: May 9, 2019/ 1:27 p.m.

54: RIMG0104
Description: Close-up of the surface flow off the calf hutch area to the grassed waterway.
Location: Culvert outlet north of the calf hutch area.
Camera Direction: Down and south
Date/Time: May 9, 2019/ 1:28 p.m.

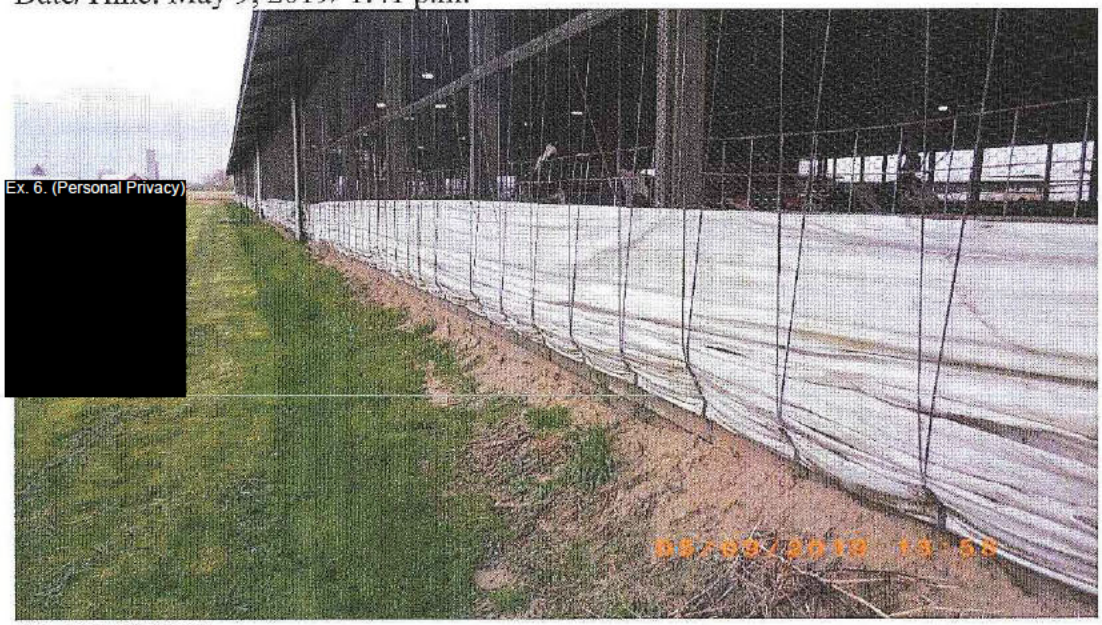
55: RIMG0105
Description: Process wastewater from the calf hutch area flows through the grassed waterway to the north into the roadside ditch.
Location: Culvert outlet north of the calf hutch area.
Camera Direction: North
Date/Time: May 9, 2019/ 1:28 p.m.

56: RIMG0106
Description: Flow from the grassed waterway flows under the dead vegetation as it flows into the roadside ditch on the south side of Day Street.
Location: In the roadside ditch on south side of Day Street.
Camera Direction: West
Date/Time: May 9, 2019/ 1:31 p.m.

57: RIMG0107
Description: At the confluence of the roadside ditch and the grassed watereway.
Location: At the confluence of the roadside ditch and the grassed waterway.
Camera Direction: West
Date/Time: May 9, 2019/ 1:31 p.m.

58: RIMG0108
Description: Sample S03 named "Tile Calf Hutch" was from where the surface flow from the calf hutch area and the culvert outlet combine in the grassed waterway.
Location: Culvert outlet north of the calf hutch area and at the southeast side of the grassed waterway.
Camera Direction: Down
Date/Time: May 9, 2019/ 1:41 p.m.

59: RIMG0109
Description: Sample S03 named "Tile Calf Hutch" was from where the surface flow from the calf hutch area and the culvert outlet combine in the grassed waterway. Red circle is around the culvert outlet.
Location: Culvert outlet north of the calf hutch area.
Camera Direction: Southwest
Date/Time: May 9, 2019/ 1:41 p.m.



60: RIMG0110
Description: East side of the Milking and Dry Cow Barn, some sand from the barn being pushed out.
Location: East side of the Milking and Dry Cow Barn.
Camera Direction: South
Date/Time: May 9, 2019/ 1:58 p.m.

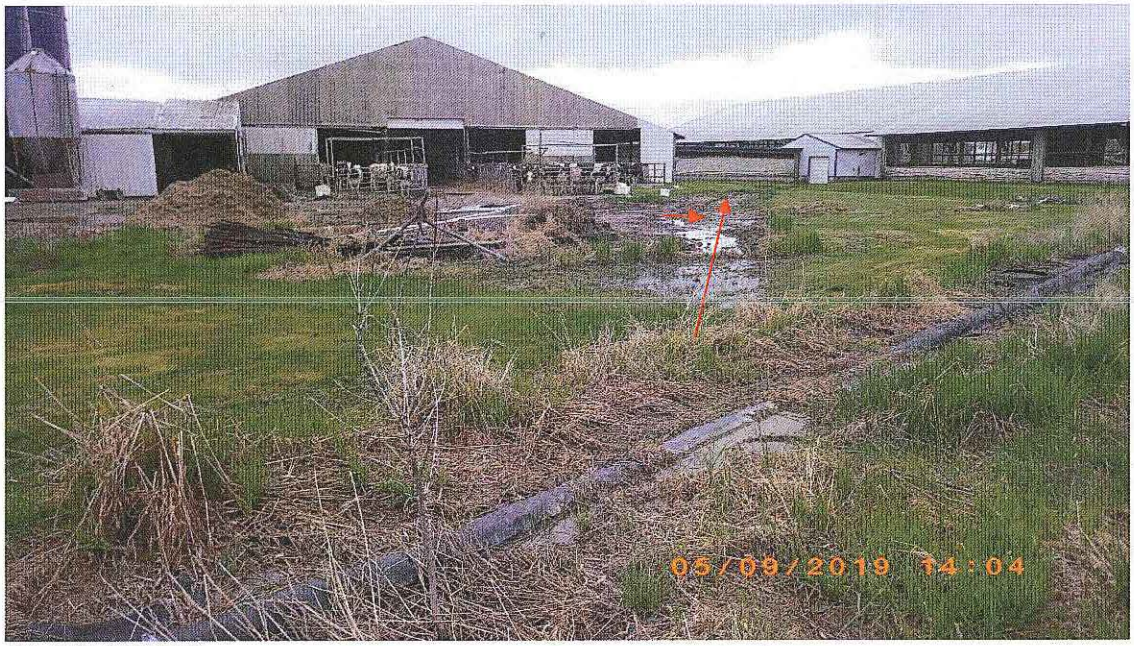
61: RIMG0111
Description: Stormwater flowing from the field to the southeast of Greenleaf's production area.
Location: Southeast corner of the Milking and Dry Cow Barn.
Camera Direction: North
Date/Time: May 9, 2019/ 1:59 p.m.

62: RIMG0112
Description: Used bedding outside the Milking and Dry Cow Barn mixing with stormwater and flowing north.
Location: Southwest corner of the Milking and Dry Cow Barn.
Camera Direction: North
Date/Time: May 9, 2019/ 2:01 p.m.

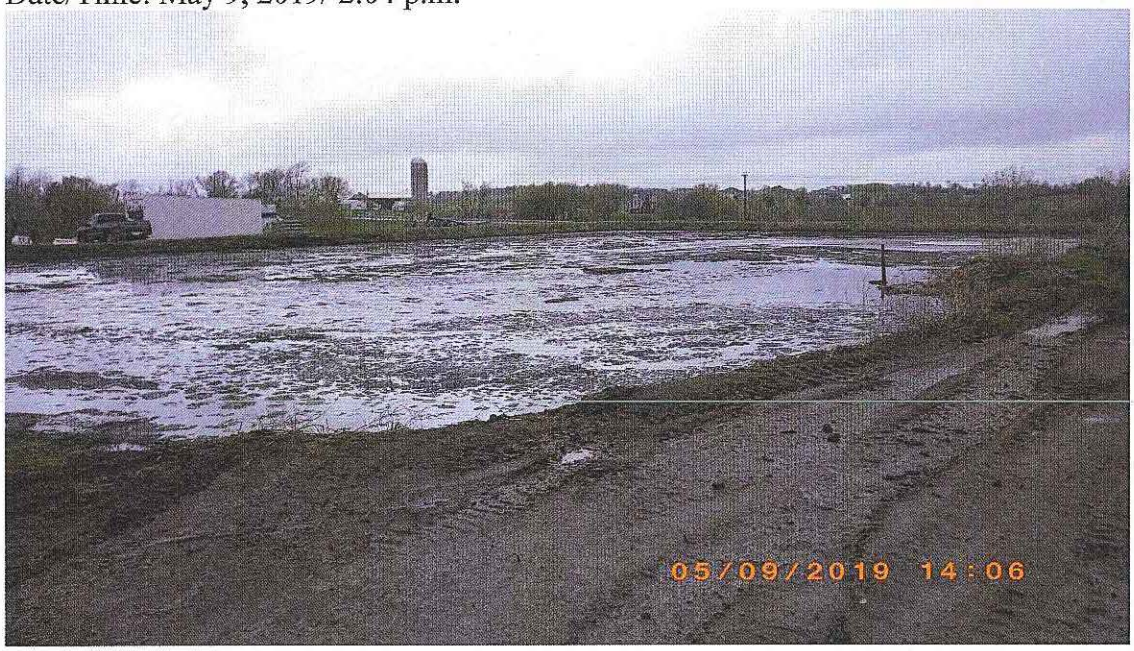
63: RIMG0113
Description: EPA observed stormwater mixed with used bedding flowing to the north and stormater mixing with manure and feed from the open feed lot connected to the Heifer and Steer Barn flowing to the northeast. Both flow channels merge and flow through a culvert inlet that conveys flow under the cow walkway (red circle is the location of the culvert inlet).
Location: Southwest of the Milking and Dry Cow Barn and south of the Heifer and Steer Barn.
Camera Direction: Northeast
Date/Time: May 9, 2019/ 2:02 p.m.

64: RIMG0114
Description: EPA observed stormwater mixed with used bedding flowing to the north and stormwater mixing with manure and feed in the open feed lot connected to the Heifer and Steer Barn to the northeast. Both flow channels merge and flow through the culvert inlet that conveys flow under the cow walkway (red circle is the location of the culvert inlet).
Location: South of the Heifer and Steer Barn
Camera Direction: Northeast
Date/Time: May 9, 2019/ 2:03 p.m.

65: RIMG0115
Description: Stormwater flowing from the southwest to the northeast.
Location: South of the Heifer and Steer Barn.
Camera Direction: Southwest.
Date/Time: May 9, 2019/ 2:04 p.m.



66: RIMG0116
Description: Stormwater flowing and mixing with process wastewater from the Old Milking Cow Barn. The red arrows show the direction of flow.
Location: South of the Heifer and Steer Barn.
Camera Direction: Northeast.
Date/Time: May 9, 2019/ 2:04 p.m.



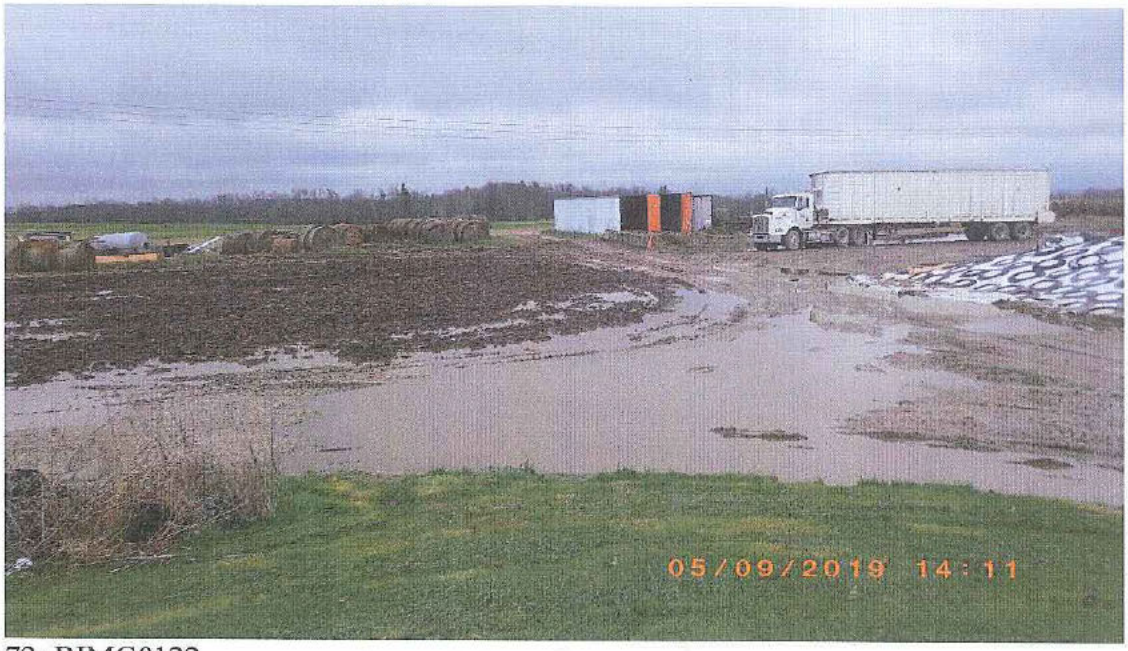
67: RIMG0117
Description: Old Pit.
Location: Southeast corner of the Old Pit.
Camera Direction: Northwest.
Date/Time: May 9, 2019/ 2:06 p.m.

68: RIMG0118
Description: New Pit.
Location: Northeast corner of the New Pit.
Camera Direction: Southwest.
Date/Time: May 9, 2019/ 2:06 p.m.

69: RIMG0119
Description: Between the Old Pit and New Pit.
Location: Between the Old Pit and New Pit.
Camera Direction: West.
Date/Time: May 9, 2019/ 2:06 p.m.

70: RIMG0120
Description: At the southeast corner of the New Pit.
Location: Southeast corner of the New Pit.
Camera Direction: North.
Date/Time: May 9, 2019/ 2:09 p.m.

71: RIMG0121
Description: Exposed feed stored south of the New Pit.
Location: Southwest corner of the New Pit.
Camera Direction: Southeast.
Date/Time: May 9, 2019/ 2:10 p.m.



72: RIMG0122
Description: Stormwater flows on to Greenleaf's production area from the fields to south and southwest.
Location: Southwest corner of the New Pit.
Camera Direction: Southwest.
Date/Time: May 9, 2019/ 2:11 p.m.

73: RIMG0123
Description: New Pit west berm.
Location: Southwest corner of the New Pit.
Camera Direction: North.
Date/Time: May 9, 2019/ 2:11 p.m.

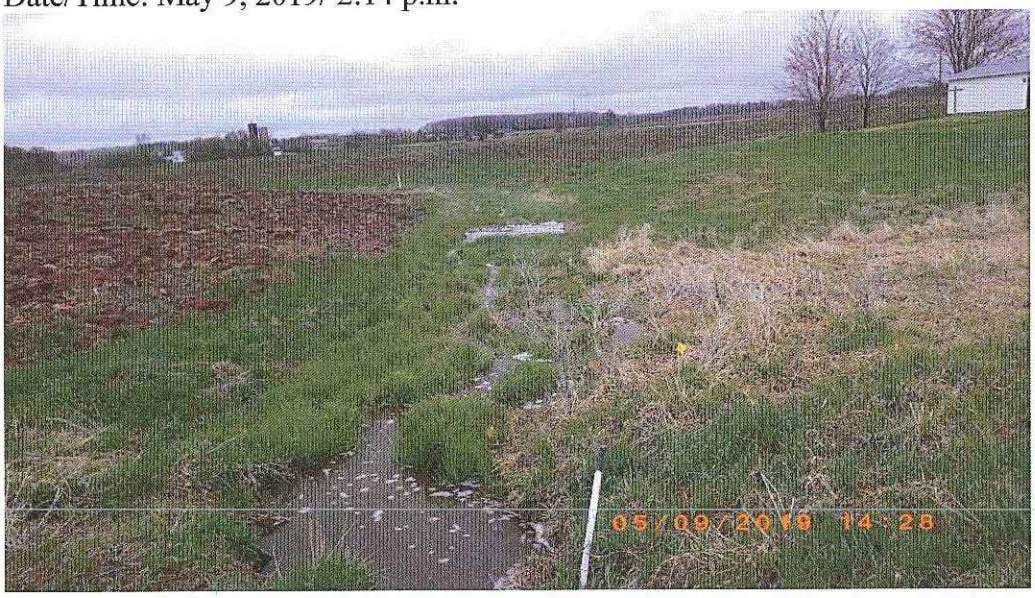
74: RIMG0124
Description: EPA observed rodent holes on the west berm of the New Pit.
Location: West berm of the New Pit.
Camera Direction: Down and east.
Date/Time: May 9, 2019/ 2:13 p.m.

75: RIMG0125
Description: Large rodent hole on the west berm of the New Pit.
Location: West berm of the New Pit.
Camera Direction: Down and east.
Date/Time: May 9, 2019/ 2:13 p.m.

76: RIMG0126
Description: Silage feed pad outfall pipe
Location: Northwest side of the New Pit.
Camera Direction: Southeast.
Date/Time: May 9, 2019/ 2:14 p.m.

77: RIMG0127
Description: Between the New Pit and Old Pit on the west side of the pits.
Location: Between the New Pit and Old Pit on the west side.
Camera Direction: East.
Date/Time: May 9, 2019/ 2:14 p.m.

78: RIMG0128
Description: Concrete channel that conveys process wastewater from the Old Pit to the New Pit.
Location: Betweeen the Old Pit and New Pit on the west side of the concrete channel.
Camera Direction: Northeast
Date/Time: May 9, 2019/ 2:14 p.m.



79: RIMG0129
Description: The culvert outlet from the merged channels from the residence to the east and the dredged ditch from Greenleaf's production area flowed through a culvert under Day Street to the grassed waterway on the north side of Day Street to the unnamed tributary of the East River.
Location: Culvert outlet on the north side of Day Street conveys flow from the merging of the stormwater from the east and the process wastewater from the dredged ditch on Greenleaf's production area.
Camera Direction: North.
Date/Time: May 9, 2019/ 2:28 p.m.

80: RIMG0130
Description: Continuation of flow from the culvert outlet that merged channels from the stormwater coming from the east and the dredged ditch from Greenleaf's production area that flowed through a culvert under Day Street to the grassed waterway on the north side of Day Street to the unnamed tributary of the East River.
Location: Culvert outlet on the north side of Day Street conveyed flow from the merging of the stormwater from the east and the process wastewater from the dredged ditch on Greenleaf's production area.
Camera Direction: North.
Date/Time: May 9, 2019/ 2:28 p.m.

81: RIMG0131
Description: Accidental Photo
Location:
Camera Direction:
Date/Time: May 9, 2019/ 5:39 p.m.